Amendment to the Claims

1. (Currently amended) A magnetic resonance imaging (MRI) device, comprising:

an inner gradient coil assembly directly adjacent ~~proximate~~ a patient positioning area along the horizontal length of the inner gradient coil assembly;

an outer gradient coil assembly directly adjacent ~~proximate~~ a magnet assembly along the horizontal length of the outer gradient coil assembly; and

a damping layer sandwiched directly between said inner and outer gradient coil assemblies, along the horizontal length of the inner and outer gradient coil assemblies, said damping layer ~~comprising at least one separate viscoelastic layer consisting of at least one of foam and or rubber~~ at least two vertically separated non-contacting viscoelastic layers, with each viscoelastic layer consisting of at least one of foam or rubber, and at least one high modulus cylinder sandwiched between said two vertically separated non-contacting viscoelastic layers.

2. (Cancelled)

3. (Currently amended) The MRI device of claim [[2]] 1, wherein said high modulus cylinder is composed of at least one of ceramic, glass filament wound tube, carbon fiber, and another non-conductive material exhibiting a high modulus.

4. (Cancelled).

5. (Currently amended) The MRI device of claim 1, further comprising at least one additional damping layer consisting of at least one of foam or rubber positioned between said outer gradient coil assembly and said magnet assembly, along the horizontal length of the outer gradient coil assembly and said magnet assembly.

6. (Currently amended) The MRI device of claim 1, further comprising at least one additional damping layer consisting of at least one of foam or rubber positioned between said inner gradient coil assembly and said patient positioning area, along the horizontal length of the inner gradient coil assembly and said patient positioning area.

7. (Currently amended) The MRI device of claim 1, wherein said damping layer comprises a plurality of high modulus cylinders, and wherein each of said plurality of high modulus cylinders is positioned between at least two vertically separated non-contating ~~separate~~ viscoelastic layers consisting of at least one of foam or rubber.

8. (Original) The MRI device of claim 1, wherein said inner gradient coil assembly generates a magnetic field gradient in response to the presence of a magnetic field generated by said magnet assembly; and wherein said outer gradient coil assembly shields the magnetic field gradient generated by said inner gradient coil assembly from radiating outwardly from the MRI device.

9. (Currently amended) A method of manufacturing a magnetic resonance imaging (MRI) device, comprising:

forming a space between a first gradient coil assembly and a second gradient coil assembly;

positioning at least one high modulus cylinder in the space before pouring a liquid viscoelastic material consisting of at least one foam or rubber into the space;

allowing the liquid viscoelastic material to solidify within the space in order to form a vertically separated ~~separate~~ damping layer along the horizontal length of the space between the first gradient coil assembly and the second gradient coil assembly, with the damping layer comprising at least one high modulus cylinder sandwiched between at least two vertically separated non-contacting viscoelastic layers, with each viscoelastic layer consisting of at least one of foam or rubber.

10. (Cancelled)

11. (Cancelled)

12. (Original) The method of claim 10, wherein the high modulus cylinder is at least one of ceramic, glass filament wound tube, and carbon fiber.

13. (Currently amended) The method of claim 9, further comprising positioning a plurality of high modulus cylinders before the pouring step in the space such that each of the plurality of high modulus cylinder does not directly contact another high modulus cylinder, the first gradient coil, and the second gradient coil.

14. (Currently amended) A magnetic resonance imaging (MRI) device, comprising:

a magnet assembly configured to generate a magnetic field;

a patient positioning area;

a first gradient coil assembly directly adjacent ~~proximate~~ said patient positioning area, along the length of the first gradient coil assembly, configured to produce a magnetic field gradient in response to the presence of a magnetic field generated by said magnet assembly;

a second gradient coil assembly directly adjacent ~~proximate~~ said magnet assembly, along the length of the first gradient coil assembly, configured to block the magnetic field gradient generated by said first gradient coil assembly from radiating outwardly from the MRI device; and

a damping layer sandwiched between said first and second gradient coil assemblies, along the length of the first and second gradient coil assemblies, wherein said damping layer comprises at least one high modulus cylinder sandwiched between two vertically separated non-contacting ~~separate~~ viscoelastic layers consisting of at least one of foam or rubber.

15. (Original) The MRI device of claim 14, wherein said high modulus cylinder is composed of at least one of ceramic, glass filament wound tube, and carbon fiber.

16. (Original) The MRI device of claim 14, wherein each of said viscoelastic layers is composed of at least one of rubber and foam.

17. (Currently amended) The MRI device of claim 14, further comprising at least one additional damping layer consisting of at least one foam or rubber positioned between said second gradient coil assembly and said magnet assembly, along the horizontal length of the second gradient coil assembly and said magnet assembly.

18. (Currently amended) The MRI device of claim 14, further comprising at least one additional damping layer consisting of at least one of foam or rubber positioned between said first gradient coil assembly and said patient positioning area, along the horizontal length of the first gradient coil assembly and said patient positioning area.

19. (Currently amended) The MRI device of claim 14, wherein said damping layer comprises a plurality of high modulus cylinders, and wherein each of said plurality of high modulus cylinders is positioned between at least two vertically separated non-contacting ~~separate~~ viscoelastic layers consisting of at least one of foam or rubber.

20. (Original) The MRI device of claim 14, further comprising a radiofrequency (RF) coil assembly configured to transmit a radiofrequency pulse and detect a plurality of MR signals induced from a subject being imaged.